



Course: Anatomy

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Department: Department of Anatomy, Faculty of Medicine, University of Rijeka

Study program: University Integrated Undergraduate and Graduate Study of Dental Medicine

(in English)
Study year: 1st

Academic year: 2023./24.

SYLLABUS

Course description (a brief description of the course, general instructions, where and in what form the lessons are organized, necessary equipment, instructions for attendance and preparation for classes, student obligations, etc.):

Anatomy is a first-year compulsory course of the Integrated Undergraduate and Graduate University Study of Dental Medicine in English. The course is held for 25 mondays in the first and second semester and consists of 38 hours of lectures, 46 hours of seminars, and 66 hours of practicals, a total of 150 hours (17.5 ECTS).

The course aims to learn about the morphological and structural organization of the human body through topographic and systematic anatomy. Acquired knowledge of anatomy should enable the students to better understand the physiological, pathophysiological, and pathological processes in the body and master the clinical subjects of dental medicine. Students will acquire knowledge of general anatomy and knowledge of the structure of organs.

Course content: general anatomy, general and special osteology, general and special syndesmology, general and special myology, general and special neurology, general and special angiology, general and special splanchnology, special senses, topographic anatomy of the head and neck, topographic anatomy of the thoracic cavity and abdomen, anatomy of the upper and lower extremities.

Learning outcomes:

I. Cognitive domain - knowledge

Acquisition of basic theoretical knowledge in the field of human body structure.

II. Psychomotor domain - skills

Acquiring the skills of recognizing and showing anatomical structures on a cadaver and concluding about the mutual relations of individual organs within certain topographic regions.

Forms of teaching:

Classes are held in the form of lectures, seminars, and practicals. During the practicals, students





must have protective clothing and instruments to show the anatomical structures on the anatomical sections of the corpse (anatomical tweezers, button probe, and gloves as needed). For the course, the Department of Anatomy organizes periodic theoretical and practical consultations with teachers and an anatomical classroom study time where students can watch and repeat anatomical structures and consult student demonstrators of the Department of Anatomy.

Assigned reading:

- 1. Color Atlas of Human Anatomy, Volume 1, Locomotor system (Platzer)
- 2. Color Atlas of Human Anatomy, Volume 2, Internal organs (Fritsch, Kuehnel)
- 3. Color Atles of Human Anatomy, Volume 3, Nervous System and Sensory organs (Kahle, Frotscher)

Optional/additional reading:

- 1. Sobotta Anatomy Textbook, 1st Edition (Paulsen, Böckers, Waschke)
- 2. Gray's Anatomy for students, 3rd Edition (Drake, Vogl, Mitchell)
- 3. Anatomy for Dental Medicine, Latin nomenclature, 2nd Edition (Baker)
- 4. Class Materials Structure of the Extremities
- 5. Class Materials Systematic and Topographic Anatomy of the Head and Neck

COURSE TEACHING PLAN:

The list of lectures (with topics and descriptions):

L1. Introduction to anatomy.

<u>Learning outcomes:</u> The aim is to acquaint students with the subject they are beginning to study, anatomy will be defined as a morphological science. Anatomical methods of study will be analyzed, and types of anatomy will be defined. Distinguish the organic system as a functional whole, analyze 10 organic systems.

L2. General terms. Anatomical orientation, planes, and axes.

<u>Learning outcomes:</u> Define the concepts of anatomical orientation and the anatomical position of the body, which will show the position of the three basic orientation planes and axes concerning the body. Students will begin to use Latin terminology.

L3. General syndesmology. Continuous and discontinuous joints.

<u>Learning outcomes:</u> Analyze and discuss the general principles of the structure of joint. Explain the structure and function of syndesmosis, synchondrosis, synostosis, and diarthrosis with examples. Define and describe shapes of articulated bodies of spherical, ellipsoidal, cylindrical, angular, and saddle joints, types of joints by shape and movements.

L4. General syndesmology. Synovial joint composition-

<u>Learning outcomes:</u> Describe major parts of synovial joints, define the shapes of the articulating bodies and corresponding joint types, show, and describe movements in synovial joints.





L5. General myology. Muscle tissue and muscular system. Division of muscles. Skeletal, cardiac, and smooth muscles.

<u>Learning outcomes:</u> Define and describe general principles of skeletal muscle structure, skeletal muscle parts, and skeletal muscle shapes. Fascia as an auxiliary muscle structure.

L6. General myology. Auxiliary structures of muscles.

Learning outcomes: Define and describe fascia as an auxiliary structure of muscles.

L7. Cardiovascular system. Arteries. Veins. Lymphatic system.

<u>Learning outcomes:</u> Describe and define cardiovascular system as an organ system, the types of blood vessels, the structure of the blood vessels wall, and blood circulation.

L8. Peripheral nervous system. N. spinalis. Peripheral nerve plaxuses for innervation of extremities.

<u>Learning outcomes</u>: Analyze and discuss the general organs of the nervous system. Define peripheral nervous system. Explain the neural segment. Describe the spinal nerve, the branches, the formation of peripheral plexuses, and the peripheral nerves.

L9. General features of the cranial bones. Division of the cranial bones.

<u>Learning outcomes</u>: As an introduction to the study of the skeleton of the head, define and describe general features of the skull bones, skull base, and skull roof. Define and describe the internal and external skull base, and bones composing it.

L10. Cranial norms. Joints of skull bones.

<u>Learning outcomes:</u> Define five cranial norms (norma frontalis, lateralis, superior, inferior, and posterior). Describe major joints of the skull and craniometrics points.

L11. Masticatory apparatus. Teeth.

<u>Learning outcomes:</u> Analyze and describe the shapes and parts of teeth. Define primary and permanent dentition.

L12. Masticatory apparatus. Temporomandibular joint.

<u>Learning outcomes</u>: For articulatio temporomandibularis analyze and describe joint surfaces, discus articularis, and joint capsule, movements performed in it, on the example of m. masseter explain why a particular muscle performs a certain function.

L13. Vertebral column. Ribs. Sternum

<u>Learning outcomes:</u> Analyze and describe general features of vertebral column, its parts and curves. Analyze and describe morphological features of ribs and sternum.

L14. Medulla spinalis.

<u>Learning outcomes</u>: Analyze and describe external shape and location of the spinal cord, structure, and functional arrangement of the gray matter of the spinal cord, arrangement of motor, sensory, autonomic neurons and interneurons, connection of spinal cord neurons with spinal nerve fibers.





L15. General neurology. Nervous tissue. Anatomical and functional divisions of the nervous system.

<u>Learning outcomes:</u> For the nervous system define neuron and nerve tissue support cells, gray and white matter of nervous tissue, morphological and functional division of the nervous system, and its special caracteristics.

L16. Organs of the central nervous system.

<u>Learning outcomes:</u> Analyze and describe arrangement of the organs of the central nervous system. Define general features of cerebrum, cerebellum, and brainstem – mesencephalon, pons, and medulla oblongata.

L17. Distribution of gray matter and white matter of the brainstem and cerebellum.

<u>Learning outcomes:</u> For the cerebellum, describe external shape and connection with parts of the brain stem, arrangement, and functional significance of the gray matter of the cerebellum, cortex cerebelli and deep gray matter.

L18. Distribution of gray matter and white matter of the cerebrum. Blood vessels of the brain and spinal cord.

<u>Learning outcomes</u>: For the cerebrum, describe division into hemispheres and telencephalon medium, external shape and location of the cerebrum, structure and functional distribution of gray matter, parts of the telencephalon medium. Analyze and define blood vessels of the brain and spina cord, the path and branching of the intracranial part of the a. vertebralis and a. carotis internae.

L19. Head and neck muscles.

<u>Learning outcomes:</u> Define and describe division into muscle groups and group characteristics. Analyze and discuss masticatory muscles and their relationship with the function of the temporomandibular joint.

L20. Neck fascia.

<u>Learning outcomes:</u> Define and describe the concept of neck fascia, and the division of the fascia into sheets.

L21. Arterial supply of head and neck. A. carotis communis et externa.

<u>Learning outcomes</u>: Define and describe exit point, path, and terminal branching of a. carotis communis, path, terminal and collateral branching and area of irrigation of the a. carrotis externa.

L22. Arterial supply of head and neck. A. subclavia.

<u>Learning outcomes:</u> Define and describe exit point, path, collateral and terminal branching and area of irrigation a. subclavia.

L23. Overview of the innervation of the head and neck.

<u>Learning outcomes:</u> For cranial nerves define twelve cranial nerves, types of fibers that contain cranial nerves and corresponding nuclei in brainstem, and generally describe the principles of innervation of the head and neck.





L24. Nervus facialis.

<u>Learning outcomes</u>: On the example of n. facialis define nuclei in the brainstem and types of fibers, sensory ganglion, and parasympathetic ganglion. Analyze and describe the site of exit from the brain, the path through the cranial cavity, branching into intrapetrous and extrapetrous branches and the area of innervation of n. facialis.

L25. Autonomic innervation of head and neck organs.

<u>Learning outcomes:</u> Define and describe the centers and pathways of the autonomic nervous system, the reflex arc of the autonomic nervous system, explain the term paravertebral and prevertebral autonomic ganglia, and the neck part of the truncus sympathicus.

L26. Parasympathetic ganglia of the head and neck.

<u>Learning outcomes:</u> Define and describe parasympathetic ganglia of the n. facialis and n. glossopharyngeus.

L27. General splanchnology. Overview of the organs of head and neck.

<u>Learning outcomes</u>: Define and describe visceral organs. Describe the principles of composition of the visceral organs, distinguish and describe the principles of composition of the hollow and parenchymatous organs. Analyze and describe general arrangement of the organs of head and neck, their relations and communications.

L28. Oral cavity: overview, vasculature, and innervation.

<u>Learning outcomes</u>: Define and describe: walls (cheek, lips, palate, and floor of the oral cavity) and communications, alveodental arches, the division of the oral cavity into a vestibule, and the oral cavity propper. Describe and discuss structure and composition of the tongue. Analyze parts of teeth and its general structure. Explain differences between permanaent and decidual teeth. Distinguish and describe the shape of morphologically different permanent teeth, incisors, canines, premolars and molars.

L29. Orbit.

<u>Learning outcomes</u>: Analyze and describe walls of orbit, divisions and content of the orbit, vessels and nerves passing through orbit.

L30. Eyeball.

<u>Learning outcomes:</u> Analyze the embryonic origin and morphology of the eyeball. Analyze and describe parts of the outer, middle, and inner eyeball layers. Define the content of the eyeball.

L31. Regio auricularis.

<u>Learning outcomes</u>: Analyze and describe boundaries and content of the regio auricularis. Define structures, nerves and vessels of the region auricularis.

L32. Ear. External and middle ear.

<u>Learning outcomes</u>: Analyze and describe parts of the external and middle ear. Describe structure, innervation and irrigation of auricle and external acoustic meatus. Analyze and describe the walls and content of the cavitas tympani. Describe mastoid cells. Analyze and describe structure of tuba auditiva and its role in ventilation of the middle ear.





L33. Thoracic cavity.

<u>Learning outcomes</u>: Describe and explain external appearance and torso boundaries towards the neck, upper and lower extremities, and division of the torso into chest, abdomen, and pelvis, division of torso cavities into thoracic, abdominal, and pelvic cavities. Define the anatomical elements of the chest wall (skeleton, muscles, fascia, and serous membranes), the position of the thoracic cavity organs, diaphragm morphology, function and innervation.

L34. Heart.

<u>Learning outcomes</u>: Describe small and large blood circulation, define and distinguish their function. Describe the structure of the heart wall, describe the layers of the heart wall; endocardium, myocardium and epicardium, describe the shape and features of 4 heart cavities; right and left atria and right and left ventricles. Describe 4 cardiac orifices, describe valves of 4 cardiac orifices, define conductive cardiac musculature and explain its structure and function, describe irrigation (aa. and vv. coronariae), analyze topographic relations of the heart.

L35. Abdominal cavity.

<u>Learning outcomes:</u> Describe and explain basic features of the structure of internal organs. Describe the hollow organ on the example of the heart and intestines. Describe the morphological and functional features of the structure of parenchymal organs and on the example of the liver and describe the stroma and parenchyma. Define the term serous membrane. Describe the peritoneal serous membrane, explain its function. Define the anatomical elements of the abdominal wall and divisons of the abdominal cavity.

L36. Digestive system.

<u>Learning outcomes</u>: List and describe the organs of the digestive system and their major morphological and topographical features.

L37. Pelvis.

<u>Learning outcomes:</u> Define and describe pelvic space. List and explain the topographic relationships of organs in the lesser pelvis.

L38. Genital system.

<u>Learning outcomes:</u> List and describe the organs of the male genital system and their major morphological and topographical features. List and describe the organs of the female genital system and their major morphological and topographical features.

The list of seminars with descriptions:

Students have to study the theory before coming to the seminars.

S1. General osteology.

<u>Learning outcomes</u>: To analyze and discuss general principles of skeletal element structure. Systematize skeletal elements by shape, structure, functional characteristics, and developmental changes of the skeleton. Define the division of the skeletal system into appendicular and axial skeletons and define the bones that make up the bones of individual groups. Bone as an organ of the skeletal system (a division of bone types into long, short, and flat, define pneumatic and sesame bones, the structure of a compact and spongy bone





substance, skeletal development through chondral and desmal ossification). Describe the main morphological characteristics of the skeletal elements of the upper and lower extremities.

S2. General syndesmology. Division of joints by shape. Biomechanics of joints.

<u>Learning outcomes:</u> Practice describing joint surfaces, joint capsules, and movements that take place in the joints of the upper and lower extremities. Analyze the biomechanical laws of motion in the joints. Show and analyze movements in the joints.

S3. General myology. Muscle function and innervation.

<u>Learning outcomes</u>: Analyse muscle function (isometric and isotonic contraction, and muscle tone). Discuss the position of muscle groups relative to a joint and the axis of a particular movement in that joint. Based on the muscles of the extremities, analyze the position of muscle groups in the axis of the joint and their agonistic, synergistic, and antagonistic effects. Define neuromuscular junction and principles on innervation of skeletal muscles.

S4. Plexus brachialis. Plexus lumbalis. Plexus sacralis.

<u>Learning outcomes:</u> Analyze and discuss the formation of plexus brachialis, lumbalis, and sacralis. Define the nerves of listed plexuses involved in innervation of upper and lower extremity.

S5. Os temporale.

<u>Learning outcomes:</u> Analyze and describe major parts of the os temporale. Define special morphological features for each major part of the bone. Analyze canals that penetrate petrous part of the temporal bone.

S6. Mandibula. Maxilla.

<u>Learning outcomes:</u> Analyze and describe major parts of the mandibula. Define special morphological features for each part of the bone. Analyze and describe major parts of the maxilla. Define special morphological features for each part of the bone.

S7. Vertebrae. Joints between vertebrae.

<u>Learning outcomes:</u> Analyze and describe major parts of typical vertebra. Define different types of vertebrae and their special features. Analyze and describe atypical vertebrae, sacrum and os coccyges. Define joints between vertebrae.

S8. CNS Functional systems. Motor systems.

<u>Learning outcomes</u>: Define the pathways of the nervous system and analyze the types of pathways concerning function. Understand the principle of transmitting stimuli from neuron to neuron via synapses. Analyze the origin and center at which the path fibers begin or end. Describe the pyramidal motor pathways (tractus corticospinalis anterior et lateralis, tractus corticonuclearis), the centers and three circular pathways of the extrapyramidal system, and the efferent pathways of the extrapyramidal system: tractus rubroreticulospinalis, tectospinalis, vestibuloreticulospinals.

S9. CNS Functional systems. Sensory systems.

Learning outcomes: Analyze and describe non-specific and specific sensory pathways. Describe





the position of the body of neurons, the path of neuronal fibers and the function of the following pathways: pathways of nonspecific sensations (fasciculus gracilis et cuneatus, tractus spinothalamicus anterior et lateralis, tractus spinocerebellaris anterior et posterior), pathways of specific sensations (visual, auditory, vestibular, taste).

S10. Overview of topographical regions of the head and neck.

<u>Learning outcomes:</u> Analyze and describe topographical regions of the head and neck. Define their relations, mutual boundaries and communications.

S11. A. maxillaris. Veins of the head and neck.

<u>Learning outcomes:</u> Analyze and describe exit point, path, and termination of a. maxillaris, define the topographic relations of the a. maxillaris according to the content of the infratemporal fossa, importance of a. maxillaris for irrigation of teeth, upper and lower jaws. Analyze and describe veins of the head and neck.

S12. N. trigeminus.

<u>Learning outcomes:</u> Define n. trigeminus, its three divisions, and ggl. trigeminale. Analyze and discuss the exit from the brain, the passage through the cranial base, the types of fibers, branches, and the area of innervation of n. ophtalmicus, n. maxillaris, and n. mandibularis.

S13. Cranial nerves (nn. I, II, III, IV, VI, VIII, IX, X, XI, and XII).

<u>Learning outcomes:</u> Analyze and discuss the exit from the brain, the passage through the cranial base, the types of fibers, branches, and the area of innervation of nn. I, II, III, IV, VI, VIII, IX, X, XI, and XII.

S14. Mastication. Swallowing. Breathing. Phonatio.

<u>Learning outcomes:</u> Analyze and discuss structure of the temporomandibular joint, principles of mastication and function of the masticatory muscles. Describe the major stages of the act of swallowing. Describe general principles of breathing and phonation.

S15. Organa oculi accessoria.

<u>Learning outcomes:</u> Analyze and describe the structure, innervation and irrigation of the eyelids and lacrimal apparatus. Learn the origin, insertion, innervation and function of extrinsic muscles of the eyeball.

S16. Inner ear.

<u>Learning outcomes:</u> Analyze and describe parts of the internal ear, the bony and membranous labyrinth. Define organs of balance and the organ of hearing.

S17. Respiratory system. Lungs.

<u>Learning outcomes:</u> Analyze and describe the organs of the respiratory system and their major morphological and topographical features. Define the position and shape of the right and left lungs. Analyze the contents of the hilum pulmonis and the elements of the pulmonary root (bronchus principalis, a. and v. pulmonalis), discuss the topographic relationships of the lungs to other organs of the thoracic cavity. Describe the pleura parietalis and pleura visceralis.





S18. Retroperitoneal space. Urinary system.

<u>Learning outcomes:</u> Analyze and describe the boundaries of the retroperitoneal space. List and explain the topographic relationships of organs in the retroperitoneal space. Define the organs of the urinary system and their major morphological and topographical features.

S19. Aorta. V. cava superior. Vena cava inferior. Vena portae.

<u>Learning outcomes:</u> Analyze and describe small and large blood circulation, define and distinguish their function. Describe arcus aortae, aorta thoracica, aorta abdominalis and its branches. Describe v. cava superior and inferior and its tributaries. Describe portal vein, its tributaries, and anastomoses.

The list of practicals with descriptions:

Students have to study the theory before coming to the practicals. It is obligatory to wear a lab coat and have tweezers or probe.

P1. Bones of upper extremity.

<u>Learning outcomes</u>: On anatomical preparations, place the skeletal element in the orientation position, argue the way in which the orientation was performed. Show and describe the parts of the bones that make up the skeletal element. Show the position of certain roughnesses, bumps and nodules, and bone lines and ridges that serve as muscle grips. Show and describe the shape and position of joint surfaces. It includes the bones of the upper extremity: clavicula, scapula, humerus, ulna, radius, carpal, metacarpal bones, and finger joints.

P2. Bones of lower extremity.

<u>Learning outcomes</u>: On anatomical preparations, place the skeletal element in the orientation position, argue the way in which the orientation was performed. Show and describe the parts of the bones that make up the skeletal element. Show the position of certain roughnesses, bumps and nodules, and bone lines and ridges that serve as muscle grips. Show and describe the shape and position of joint surfaces. It includes the bones of the lower extremity: os coxae, femur, tibia, fibula, tarsal, metatarsal bones, and members of the toes.

P3. Joints of upper extremity.

<u>Learning outcomes</u>: On anatomical preparations, show and describe joint surfaces, joint capsule, determine the type of joint regarding the shape of joint bodies and show the movements that take place in a particular joint. It includes the joints of the upper extremity: art. sternoclavicularis, art. acromioclavicularis, art. humeri, art. cubiti, membrana interossea antebrachia, art. radiocarpalis, art. mediocarpalis, art. carpometacarpalis pollicis, artt. metacarpophalangeae, and artt. interphalangeae manus.

P4. Joints of lower extremity.

<u>Learning outcomes</u>: On anatomical preparations, show and describe joint surfaces, joint capsule, determine the type of joint regarding the shape of joint bodies and show the movements that take place in a particular joint. It includes the joints of the lower extremity: art. sacroiliaca, art. coxae, art. genus, art. tibiofibularis, art. talocruralis, art. talocalcaneonavicularis and art. subtalaris, artt. metatarsophalangeae, artt. interphalangeae pedis, lig. sacrotuberale et lig. sacrospinale, lig. inguinale, membrana obturatoria, symphysis pubica, membrana interossea





cruris, syndesmosis tibiofibularis, lig. platare longum, and lig. calcaneonaviculare plantare.

P5. Muscles of upper extremity.

<u>Learning outcomes</u>: In the anatomical section, show the muscles of the upper extremity in groups (shoulder girdle muscles, thoracohumeral muscles, upper arm muscles, muscles of the forearm and hand). For each group, show the muscles, show their origin and insertion, and explain the function they have in each joint.

P6. Muscles of lower extremity.

<u>Learning outcomes:</u> In the anatomical section, show the muscles of the lower extremity in goups (muscles of the hip, thigh, lower leg, and foot). For each grinsertion andmuscles, show their origin and insertion, and explain the function they have in each joint.

P7. Blood vessels of upper and lower extremity.

<u>Learning outcomes</u>: Describe and show on an anatomical preparation the path and branching of blood vessels that irrigate the upper extremity (a. axillaris, a. brachialis, a. radialis, and a. ulnaris, with corresponding veins, and v. cephalica, and v. basilica) and lower extrenity (a. femoralis, a. poplitaea, a. tibialis ant. et post. with corresponding veins, and v. saphena magna et. parva). Show the position, boundaries and content of the topographic regions of the extremities: spatium axillare, sulci bicipitales, fossa cubiti, canalis carpi, canalis inguinalis, trigonum femorale, and fossa poplitea.

P8. Nerves of upper and lower extremity. Review of upper and lower extremity.

<u>Learning outcomes</u>: Show the position and branches of the plexus brachialis, plexus lumbalis and plexus sacralis on the anatomical preparation. Review of the anatomical structures of the upper and lower extremity.

P9. Work on the specimen.

Learning outcomes: Recognition of structures on an anatomical specimen.

P10. Isolated bones of the cerebral part of the skull.

<u>Learning outcomes</u>: On the anatomical preparation of the macerated skull demonstrate the way the skull opens and separates the skull roof. Show the skull base and and its surfaces. Orient, describe, and show the basic parts of the skull bones that make up the cerebral part of the skull (os occipitale, os temporale, os sphenoidale, os parietale, os frontale).

P11. Basis cranii interna.

<u>Learning outcomes:</u> On the anatomical preparation of the macerated skull delimit and distinguish 3 pits of the inner cranial base: anterior, middle, and posterior cranial fossa. For each, show the surfaces of the parts of the skull bones that participate in the construction of each, show the communication openings and channels that penetrate it, and show the cranial spaces with which they are connected. Describe isolated bones of the cerebral part of the skull.

P12. Isolated bones of the visceral part of the skull.

<u>Learning outcomes</u>: On the anatomical preparation of the macerated skull orient, describe, and show the basic parts of the skull bones that make up the visceral part of the skull (mandibula,





maxilla, os zygomaticum, os nasale, os palatinum, os ethmoidale, os lacrimale, vomer, concha nasalis inferior).

P13. Basis cranii externa.

<u>Learning outcomes:</u> On the anatomical preparation of the macerated skull delimit and distinguish 3 fields of the external cranial base: anterior, middle, and posterior field. For each, show the surfaces of the parts of the skull bones that participate in the construction of each, show the communication openings and channels that penetrate it, and show the cranial spaces with which they are connected.

P14. Cavities of viscerocranium.

<u>Learning outcomes</u>: On the anatomical preparation of the macerated skull show and describe the limitations of the following cavities of the viscerocranium and lateral regions of the skull: orbit, nasal cavity and oral cavity, fossa temporalis, fossa infratemporalis, fossa pterygopalatina.

P15. Medulla spinalis.

<u>Learning outcomes</u>: Show and describe the shape and segments of the spinal cord on the anatomical preparation. Show the exit points of the roots of the spinal nerves, the cauda equina and the dura of the spinal cord.

P16. General description of the brain. Meninges.

<u>Learning outcomes:</u> On the anatomical preparation show and describe parts and general features of the brain. Define the parts of the dura mater, pia and arachnoid.

P17. Brainstem.

<u>Learning outcomes:</u> On the anatomical preparation, show and describe parts of the brainstem Define morphological features and structures of the medulla oblongata, pons, and mesencephalon.

P18. Cerebellum. Diencephalon.

<u>Learning outcomes</u>: On the anatomical section of the brain show and describe the cerebellum. Describe the peduncles of the cerebellum and show how they connect the cerebellum to parts of the brainstem. Demonstrate an anatomical approach, structure, and opening of the fourth ventricle and communication with the subarachnoid space. Show and describe parts of the diencephalon in the anatomical section of the brain. Demonstrate access to, structure and opening of the third chamber. Describe and show the position of the pituitary gland.

P19. Telencephalon.

<u>Learning outcomes:</u> In the anatomical section of the brain, show and describe parts, morphological features and structure, and sulci et gyri of the cerebrum. Define the approach, structure, and opening of the lateral chambers. Describe and show the position of the basal ganglia.

P20. Work on the specimen.

<u>Learning outcomes:</u> Recognition of structures on an anatomical specimen.





P21. Regio mediana cervicalis. Trigonum submandibulare.

<u>Learning outcomes</u>: Using anatomical terminology, name and describe muscles of neck. Describe using anatomical terminology, name and on the anatomical section of the neck show muscle constraints, content and interrelationships of the structure that make up the content of the anterior neck region, regio colli media and trigonum submandibulare.

P22. Trigonum caroticum. Spatium parapharyngeum.

<u>Learning outcomes</u>: Using anatomical terminology, name and describe and on the anatomical section of the neck show muscle constraints, content and interrelationships of structures that make up the contents of the space lateral to the pharynx, spatium parapharyngeum (arteria carotis interna, vena jugularis interna, n. IX, n. X, n .XI and n. XII, truncus sympathicus). Describe and show on the anatomical section of the neck the muscle constraints, content and interrelationships of the structures that make up the content of the carotid triangle trigonum caroticum (path and branching of the artery carotis communis, vena jugularis interna, truncus sympathicus, n. X, n.XI, n.XII).

P23. Spatium scalenovertebrale. Regio coli lateralis.

<u>Learning outcomes</u>: Using anatomical terminology, name and describe and on the anatomical section of the neck show muscle constraints, content and interrelationships of structures that make up the contents of the spatium scalenovertebrale and lateral cervical region, region coli lateralis (a. subclavia, v. subclavia, a. carotis communis, v. jugularis int., n. phrenicus, n. vagus, truncus symathicus, plexus brachialis, plexus cervicalis, n. accessorius).

P24. Superficial neck regions. Posterior cervical region.

<u>Learning outcomes</u>: Using anatomical terminology, name and describe and on the anatomical section of the neck show muscle constraints, content and interrelationships of structures that make up the contents of the subcutaneous ventrolateral cervical region (v. jugularis externa, n. occipitalis minor, n. auricularis magnus, n transversus colli, nn. supraclaviculares). Describe and show on the anatomical section of the neck the muscle constraints, content and interrelationships of the structures that make up the content of the occipital region, regio occipitalis and posterior cervical region, regio colli posterior (n. occipitalis major, m. splenius capitis, m. semispinalis capitis, a. vertebralis, m. rectus capitis posterior major et minor, m. obliquus capitis superior et inferior.).

P25. Parotideomaseteric region. Fossa retromandibularis.

<u>Learning outcomes</u>: Describe and show on the anatomical section of the head facial nerve its branches and regions where we can find them. Describe and show in the anatomical section of the neck and using anatomical terminology, name the muscle constraints, content and interrelationships of the structures that make up the content of region parotodeomasseterica (glandula parotis, a. facialis, m. masseter) and fossa retromandibularis (glandula parotis, a. temporalis superficialis, n. facialis, retromandibular vein).

P26. Infratemporal fossa. Pterygopalaine fossa.

<u>Learning outcomes</u>: Describe and show in the anatomical section of the neck and using anatomical terminology, name the muscle constraints, content and interrelationships of the structures that make up the contents of the infratemporal fossa (n. mandibularis, a. maxillaris,





and chorda tympani). Describe and show on the anatomical section of the neck and using anatomical terminology, name the muscle constraints, content and interrelationships of the structures that make up the contents of the pterygopalatal fossa (n. maxillaris, a. maxillaris, and ganglion pterygopalatinum).

P27. Nerves of the head and neck.

Learning outcomes:

Analyze and discuss nerves of the head and neck.

P28. Blood vessels of the head and neck.

Learning outcomes:

Analyze and discuss arteries and veins of the head and neck.

P29. Oral cavity. Teeth. Pharynx.

<u>Learning outcomes</u>: On the anatomical section using anatomical terminology, name and show the walls, cavity and communications of the oral cavity. Show on the anatomical preparation parts of teeth, distinguish and describe the shape of morphologically different permanent teeth, incisors, canines, premolars and molars. On anatomical preparations, using anatomical terminology, name and show the walls, cavity and communications of the pharynx. Describe and analyze pharyngeal wall, pharyngeal fascia and gaps in the pharyngeal wall, the nasopharynx, oropharynx, laryngopharynx, and tonsils.

P30. Larynx. Nasal cavity.

<u>Learning outcomes</u>: Describe and explain wall and functional characteristics of the conductive airways. On the anatomical section using anatomical terminology, name and show the walls, cavity, and communications of the larynx and trachea. Analyze and describe the composition of the wall of the larynx and morphology of the laryngeal cartilagines. For laryngeal cartilage joints describe and explain art. cricoarythenoidea and art. cricothyroidea, movements of vocal cartilage and consequently vocal folds, adduction and abduction of the vocal cords and consequent opening and closing of the rimae vocalis. Define origin, insertion and function of the laryngeal muscles. Describe laryngeal syndesmoses, position and mobility of the epiglottis. On the anatomical preparations, using anatomical terminology, name and show the walls, cavity and communications of the nasal cavity. Analyze and describe structure and composition of the external nose. Describe morphology of tne nasal cartilagines.

P31. Salivary glands. Thyroid gland.

<u>Learning outcomes:</u> Analyze and discuss structure of the major and minor salivary glands (gl. parotis, gl. sublingualis et gl. submandibularis, gll. labiales, buccales, palatinae...). Analyze and discuss parts of the thyroid gland. On the anatomical section using anatomical terminology, name and show the parts and location of the major salivary glands.

P32. Work on the specimen.

<u>Learning outcomes:</u> Recognition of structures on an anatomical specimen.





Students' obligations:

The student is required to study in advance for each seminar and practicals.

The course is designed so that students have the opportunity to practice describing anatomical structures and also to discuss the importance of knowing the anatomical structure in their future profession. The schedule and content of classes are defined and published in advance. During the practicals, the teacher points to the anatomical specimens and monitors the participation of students in performing the practicals. An active discussion on a given topic is expected in seminars. Students achieve points through 4 midterms. Points gaining system of midterms is described in Table 1.

Assessment (exams, description of written / oral / practical exam, the scoring criteria):

ECTS Grading System:

Student grading is conducted according to the current Ordinance on Studies of the University of Rijeka (approved by the Senate) and the Ordinance on Student Grading at the Faculty of Medicine in Rijeka (approved by the Faculty Council).

Students work is assessed and graded during the course and at the final exam. During the course, a student may achieve up to 50% of the grade, and at the final exam up to 50% of the grade (meaning, out of the maximum 100 points, during the course students can achieve 50 points, and on the final exam also 50 points). Students are graded according to the ECTS credit (A-F) and numeric (1-5) system.

I. Assessment and grading in class (up to 50 points):

During the course, students are awarded points by taking 4 midterm exams:

MIDTERM 1 - EXTREMITIES (MS/MI)

MIDTERM 2 - CRANIUM AND CNS (CR/CNS)

MIDTERM 3 - TOPOGRAPHICAL ANATOMY AND ORGANS OF THE HEAD AND NECK (CC)

MIDTERM 4 - THORAX, ABDOMEN AND PELVIS (AT)

A midterms 1, 2, and 3 consists of a practical and oral examination. The practical part examines students' ability to deliver a hands-on exploration of human cadavers. Passing the practical part is a prerequisite to approach the oral part of the midterm. The oral part assesses students' theoretical knowledge. When a student passes the oral part of a midterm he/she gains a number of points that corresponds to the awarded grade. The fourth midterm consists of written test with 30 questions.

The midterms are graded as shown in Table 1:

Table 1.

	ORAL		PRAG	PRACTICAL		Max
	Grade	Points	Pass/	Points		
			fail			
EXTREMITIES	Excellent (5)	8	+	2	5	10
	Very good (4)	7				
	Good (3)	5				
	Sufficient (2)	3				
	Insufficient (1)	0	-	0		





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CRANIUM AND CNS	Excellent (5)	13	+	2	8	15
	Very good (4)	11				
	Good (3)	8				
	Sufficient (2)	6				
	Insufficient (1)	0	-	0		
TOPOGRAPHICAL	Excellent (5)	13	+	2	8	15
ANATOMY AND ORGANS	Very good (4)	11				
OF HEAD AND NECK	Good (3)	8				
	Sufficient (2)	6				
	Insufficient (1)	0	-	0		
ABDOMEN THORAX	Excellent (5)	10	/	/	4	10
	Very good (4)	8				
	Good (3)	6				
	Sufficient (2)	4				
	Insufficient (1)	0				
Sum of the points during class	Sum of the points during classes					

Students can retake a certain midterm during dates assigned by the course coordinator. The midterm can be retaken only in case(s):

- 1. justifiably not attending the regular date of the midterm
- 2. failing midterm(s) and lacking points to take the final exam
- 3. not passing the practical part of the midterm

II. Grading at the final exam (up to 50 points):

The final exam is oral and is graded as follows:

Grade	Points
Excellent (5)	50
Very good (4)	40
Good (3)	30
Sufficient (2)	25

If the applicant did not get a satisfactory grade, it will be considered that she/he did not pass the final exam.

Requirements for the final exam:

- 1. To attend classes in accordance with the Ordinance on Studies of the University of Rijeka.
- 2. To pass practical parts of all midterms.
- 3. To gain at least 25 out of 50 points during the course.

Who cannot take the final exam:

Students who gain less than 25 points during classes or who have more than 30% absence from classes cannot take the final exam, he/she must re-enroll the course in the following academic year.





III. The final grade consists of the sum of points gained during the course and at the final exam.

Final grade	
A (90-100%)	Excellent (5)
B (75-89,9%)	Very good (4)
C (60-74,9%)	Good (3)
D (50-59,9%)	Sufficient (2)

Other important information regarding to the course:

Teaching content and all information related to the course can be found on **Merlin system for e-learning** and **MS Teams** (you can access them by using student e-mail and AAI password). Lectures, seminars, and practicals are held at the **Department of anatomy**, **Faculty of medicine**.

COURSE SCHEDULE (for the academic year 2023/2024)

Date	Lectures (time and place)	Seminars (time and place)	Practicals (time and place)	Instructor
	L1/L2 08:15-09:45 MEDRI - Department of Anatomy			Juraj Arbanas, Assoc. Prof.
02.10.2023.		S1 10:00-11:30 MEDRI - Department of Anatomy		Juraj Arbanas, Assoc. Prof.
02.10.2023.			P1 12:15-13:45 MEDRI - Department of Anatomy	Bojana Čulev, DMD
			P2 14:00-15:30 MEDRI - Department of Anatomy	Bojana Čulev, DMD
	L3/L4 08:15-09:45 MEDRI - Department of Anatomy			Tamara Šoić-Vranić, Assoc. Prof.
00.40.2022		S2 10:00-11:30 MEDRI - Department of Anatomy		Tamara Šoić-Vranić, Assoc. Prof.
09.10.2023.			P3 12:15-13:45 MEDRI - Department of Anatomy	Luka Delak, MD
			P4 14:00-15:30 MEDRI - Department of Anatomy	Luka Delak, MD
16.10.2023.	L5/L6 08:15-09:45 MEDRI - Department			Sanja Zoričić Cvek, Prof.





	of Anatomy					
	C. F. Wildermy	S3 10:00-11:30 MEDRI - Department of Anatomy		Sanja Zoričić Cvek, Prof.		
			P5 12:15-13:45 MEDRI - Department of Anatomy	Diana Veljanovska, MPT		
			P6 14:00-15:30 MEDRI - Department of Anatomy	Diana Veljanovska, MPT		
	L7/L8 08:15-09:45 MEDRI - Department of Anatomy			Juraj Arbanas, Assoc. Prof.		
22.40.2022		S4 10:00-11:30 MEDRI - Department of Anatomy		Juraj Arbanas, Assoc. Prof.		
23.10.2023.			P7 12:15-13:45 MEDRI - Department of Anatomy	Bojana Čulev, DMD		
			P8 14:00-15:30 MEDRI - Department of Anatomy	Bojana Čulev, DMD		
30.10.2023.			P9 08:15-09:45 MEDRI - Department of Anatomy	Bojana Čulev, DMD		
	MIDTERM I					
	L9/L10 08:15-09:45 MEDRI - Department of Anatomy			Tamara Šoić-Vranić, Assoc. Prof.		
06.11.2023.		S5 10:00-12:15 MEDRI - Department of Anatomy		Tamara Šoić-Vranić, Assoc. Prof.		
06.11.2023.			P10 12:45-14:15 MEDRI - Department of Anatomy	Luka Delak, MD		
			P11 14:30-16:00 MEDRI - Department of Anatomy	Luka Delak, MD		
13.11.2023.	L11/L12 08:15-09:45 MEDRI - Department of Anatomy			Sanja Zoričić Cvek, Prof.		
		S6 10:00-12:15 MEDRI - Department		Sanja Zoričić Cvek, Prof.		





		of Anatomy		
			P12 12:45-14:15 MEDRI - Department of Anatomy	Diana Veljanovska, MPT
			P13 14:30-16:00 MEDRI - Department of Anatomy	Diana Veljanovska, MPT
	L13/L14 08:15-09:45 MEDRI - Department of Anatomy			Juraj Arbanas, Assoc. Prof.
20.44.2022		S7 10:00-12:15 MEDRI - Department of Anatomy		Juraj Arbanas, Assoc. Prof.
20.11.2023.			P14 12:45-14:15 MEDRI - Department of Anatomy	Bojana Čulev, DMD
			P15 14:30-16:00 MEDRI - Department of Anatomy	Bojana Čulev, DMD
	L15/L16 08:15-09:45 MEDRI - Department of Anatomy			Tanja Ćelić, Assoc. Prof.
		S8 10:00-12:15 MEDRI - Department of Anatomy		Tanja Ćelić, Assoc. Prof.
27.11.2023.			P16 12:45-14:15 MEDRI - Department of Anatomy	Luka Delak, MD
			P17 14:30-16:00 MEDRI - Department of Anatomy	Luka Delak, MD
	L17/L18 08:15-09:45 MEDRI - Department of Anatomy			Sanja Zoričić Cvek, Prof.
04.12.2022		S9 10:00-12:15 MEDRI - Department of Anatomy		Sanja Zoričić Cvek, Prof.
04.12.2023.			P18 12:45-14:15 MEDRI - Department of Anatomy	Diana Veljanovska, MPT
			P19 14:30-16:00 MEDRI - Department of Anatomy	Diana Veljanovska, MPT





11.12.2023.			P20 08:15-09:45 MEDRI - Department of Anatomy	Luka Delak, MD			
	MIDTERM II						
	L19/L20 08:15-09:45 MEDRI - Department of Anatomy			Ivana Marić, Prof.			
18.12.2023.		S10 10:00-11:30 MEDRI - Department of Anatomy		Ivana Marić, Prof.			
18.12.2023.			P21 12:15-13:45 MEDRI - Department of Anatomy	Bojana Čulev, DMD			
			P22 14:00-15:30 MEDRI - Department of Anatomy	Bojana Čulev, DMD			
	L21/L22 08:15-09:45 MEDRI - Department of Anatomy			Tamara Šoić-Vranić, Assoc. Prof.			
08.01.2024.		S11 10:00-12:15 MEDRI - Department of Anatomy		Tamara Šoić-Vranić, Assoc. Prof.			
08.01.2024.			P23 12:45-14:15 MEDRI - Department of Anatomy	Luka Delak, MD			
			P24 14:30-16:00 MEDRI - Department of Anatomy	Luka Delak, MD			
	L23/L24 08:15-09:45 MEDRI - Department of Anatomy			Juraj Arbanas, Assoc. Prof.			
15 01 2024		S12 10:00-12:15 MEDRI - Department of Anatomy		Juraj Arbanas, Assoc. Prof.			
15.01.2024.			P25 12:45-14:15 MEDRI - Department of Anatomy	Diana Veljanovska, MPT			
			P26 14:30-16:00 MEDRI - Department of Anatomy	Diana Veljanovska, MPT			
22.01.2024.	L25/L26 08:15-09:45 MEDRI - Department of Anatomy			Tanja Ćelić, Assoc. Prof.			
		S13 10:00-12:15		Tanja Ćelić, Assoc. Prof.			





		MEDRI - Department		
		of Anatomy	P27 12:45-14:15 MEDRI - Department of Anatomy	Bojana Čulev, DMD
			P28 14:30-16:00 MEDRI - Department of Anatomy	Bojana Čulev, DMD
	L27/L28 08:15-09:45 MEDRI - Department of Anatomy			Sanja Zoričić Cvek, Prof.
29.01.2024.		S14 10:00-11:30 MEDRI - Department of Anatomy		Sanja Zoričić Cvek, Prof.
			P29 12:15-14:30 MEDRI - Department of Anatomy	Luka Delak, MD
	L29/L30 08:15-09:45 MEDRI - Department of Anatomy			Tamara Šoić-Vranić, Assoc. Prof.
05.02.2024.		S15 10:00-11:30 MEDRI - Department of Anatomy		Tamara Šoić-Vranić, Assoc. Prof.
		,	P30 12:15-14:30 MEDRI - Department of Anatomy	Diana Veljanovska, MPT
	L31/L32 08:15-09:45 MEDRI - Department of Anatomy			Ivana Marić, Prof.
12.02.2024.		S16 10:00-11:30 MEDRI - Department of Anatomy		Ivana Marić, Prof.
			P31 12:15-13:45 MEDRI - Department of Anatomy	Bojana Čulev, DMD
19.02.2024.			P32 08:15-09:45 MEDRI - Department of Anatomy	Diana Veljanovska, MPT
		MI	IDTERM III	
26.02.2024.	L33/L34 08:15-09:45 MEDRI - Department of Anatomy			Sanja Zoričić Cvek, Prof.
20.02.2024.		S17 10:00-11:30 MEDRI - Department		Tanja Ćelić, Assoc. Prof.





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		of Anatomy	
0.4.00.000.4	L35/L36 08:15-09:45 MEDRI - Department of Anatomy		Juraj Arbanas, Assoc. Prof.
04.03.2024.		S18 10:00-11:30 MEDRI - Department of Anatomy	Tamara Šoić-Vranić, Assoc. Prof.
11 02 2024	L37/L38 08:15-09:45 MEDRI - Department of Anatomy		Ivana Marić, Prof.
11.03.2024.		S19 10:00-11:30 MEDRI - Department of Anatomy	Juraj Arbanas, Assoc. Prof.
18.03.2024.		MIDTERM IV	
25.03.2024.		MIDTERM RETAK	ES
08.04.2024.		FINAL EXAM	

List of lectures, seminars and practicals:

	LECTURES (Topics)	Teaching hours	Location/Lecture room
L1	Introduction to anatomy.	1	MEDRI - Department of Anatomy
L2	General terms. Anatomical orientation, planes, and axes.	1	MEDRI - Department of Anatomy
L3	General syndesmology. Continuous and discontinuous joints.	1	MEDRI - Department of Anatomy
L4	General syndesmology. Synovial joint composition.	1	MEDRI - Department of Anatomy
L5	General myology. Muscle tissue and muscular system. Division of muscles. Skeletal, cardiac, and smooth muscles.	1	MEDRI - Department of Anatomy
L6	General myology. Auxiliary structures of muscles.	1	MEDRI - Department of Anatomy
L7	Cardiovascular system. Arteries. Veins. Lymphatic system	1	MEDRI - Department of Anatomy
L8	Peripheral nervous system. N. spinalis. Peripheral nerve plaxuses for innervation of extremities.	1	MEDRI - Department of Anatomy
L9	General features of the cranial bones. Division of the cranial bones.	1	MEDRI - Department of Anatomy
L10	Cranial norms. Joints of skull bones.	1	MEDRI - Department of Anatomy





		1	
L11	Masticatory apparatus. Teeth.	1	MEDRI - Department of Anatomy
L12	Masticatory apparatus. Temporomandibular joint.	1	MEDRI - Department of Anatomy
L13	Vertebral column. Ribs. Sternum.	1	MEDRI - Department of Anatomy
L14	Medulla spinalis.	1	MEDRI - Department of Anatomy
L15	General neurology. Nervous tissue. Anatomical and functional divisions of the nervous system.	1	MEDRI - Department of Anatomy
L16	Organs of the central nervous system.	1	MEDRI - Department of Anatomy
L17	Distribution of gray matter and white matter of the brainstem and cerebellum.	1	MEDRI - Department of Anatomy
L18	Distribution of gray matter and white matter of the cerebrum. Blood vessels of the brain and spinal cord.	1	MEDRI - Department of Anatomy
L19	Head and neck muscles.	1	MEDRI - Department of Anatomy
L20	Neck fascia.	1	MEDRI - Department of Anatomy
L21	Arterial supply of head and neck. A. carotis communis et externa.	1	MEDRI - Department of Anatomy
L22	Arterial supply of head and neck. A. subclavia.	1	MEDRI - Department of Anatomy
L23	Overview of the innervation of the head and neck.	1	MEDRI - Department of Anatomy
L24	Nervus facialis.	1	MEDRI - Department of Anatomy
L25	Autonomic innervation of head and neck organs.	1	MEDRI - Department of Anatomy
L26	Parasympathetic ganglia of the head and neck.	1	MEDRI - Department of Anatomy
L27	General splanchnology. Overview of the organs of head and neck.	1	MEDRI - Department of Anatomy
L28	Oral cavity: overview, vasculature, and innervation.	1	MEDRI - Department of Anatomy
L29	Orbit.	1	MEDRI - Department of Anatomy
L30	Eyeball.	1	MEDRI - Department of Anatomy
L31	Regio auricularis.	1	MEDRI - Department of Anatomy





L32	Ear. External and middle ear.	1	MEDRI - Department of Anatomy
L33	Thoracic cavity.	1	MEDRI - Department of Anatomy
L34	Heart.	1	MEDRI - Department of Anatomy
L35	Abdominal cavity.	1	MEDRI - Department of Anatomy
L36	Digestive system.	1	MEDRI - Department of Anatomy
L37	Pelvis.	1	MEDRI - Department of Anatomy
L38	Genital system.	1	MEDRI - Department of Anatomy
	TOTAL TEACHING HOURS	38	

	SEMINARS (Topics)	Teaching hours	Location/Lecture room
S1	General osteology.	2	MEDRI - Department of Anatomy
S2	General syndesmology. Division of joints by shape. Biomechanics of joints.	2	MEDRI - Department of Anatomy
S3	General myology. Muscle function and innervation.	2	MEDRI - Department of Anatomy
S4	Plexus brachialis. Plexus lumbalis. Plexus sacralis.	2	MEDRI - Department of Anatomy
S5	Os temporale.	3	MEDRI - Department of Anatomy
S6	Mandibula. Maxilla.	3	MEDRI - Department of Anatomy
S7	Vertebrae. Joints between vertebrae.	3	MEDRI - Department of Anatomy
S8	CNS Functional systems. Motor systems.	3	MEDRI - Department of Anatomy
S9	CNS Functional systems. Sensory systems.	3	MEDRI - Department of Anatomy
S10	Overview of topographical regions of the head and neck.	2	MEDRI - Department of Anatomy
S11	A. maxillaris. Veins of the head and neck.	3	MEDRI - Department of Anatomy
S12	N. trigeminus.	3	MEDRI - Department of Anatomy





S13	Cranial nerves (nn. I, II, III, IV, VI, VIII, IX, X, XI, and XII).	3	MEDRI - Department of Anatomy
S14	Mastication. Swallowing. Breathing. Phonatio.		MEDRI - Department of Anatomy
S15	Organa oculi accessoria. 2		MEDRI - Department of Anatomy
S16	Inner ear.	2	MEDRI - Department of Anatomy
S17	Respiratory system. Lungs.	2	MEDRI - Department of Anatomy
S18	Retroperitoneal space. Urinary system.	2	MEDRI - Department of Anatomy
S19	Aorta. V. cava superior. Vena cava inferior. Vena portae.	2	MEDRI - Department of Anatomy
	TOTAL TEACHING HOURS	46	

	PRACTICALS (Topics)	Teaching hours	Location/Lecture room
P1	Bones of upper extremity.	2	MEDRI - Department of Anatomy
P2	Bones of lower extremity.	2	MEDRI - Department of Anatomy
Р3	Joints of upper extremity.	2	MEDRI - Department of Anatomy
P4	Joints of lower extremity.	2	MEDRI - Department of Anatomy
P5	Muscles of upper extremity.	2	MEDRI - Department of Anatomy
Р6	Muscles of lower extremity.	2	MEDRI - Department of Anatomy
P7	Blood vessels of upper and lower extremity.	2	MEDRI - Department of Anatomy
Р8	Nerves of upper and lower extremity. Review of upper and lower extremity.	2	MEDRI - Department of Anatomy
Р9	Work on the specimen.	2	MEDRI - Department of Anatomy
P10	Isolated bones of the cerebral part of the skull.	2	MEDRI - Department of Anatomy
P11	Basis cranii interna.	2	MEDRI - Department of Anatomy





P12	Isolated bones of the visceral part of the skull.	2	MEDRI - Department of Anatomy
P13	Basis cranii externa.	2	MEDRI - Department of Anatomy
P14	Cavities of viscerocranium.	2	MEDRI - Department of Anatomy
P15	Medulla spinalis.	2	MEDRI - Department of Anatomy
P16	General description of the brain. Meninges.	2	MEDRI - Department of Anatomy
P17	Brainstem.	2	MEDRI - Department of Anatomy
P18	Cerebellum. Diencephalon.	2	MEDRI - Department of Anatomy
P19	Telencephalon.	2	MEDRI - Department of Anatomy
P20	Work on the specimen.	2	MEDRI - Department of Anatomy
P21	Regio mediana cervicalis. Trigonum submandibulare.	2	MEDRI - Department of Anatomy
P22	Trigonum caroticum. Spatium parapharyngeum.	2	MEDRI - Department of Anatomy
P23	Spatium scalenovertebrale. Regio coli lateralis.	2	MEDRI - Department of Anatomy
P24	Superficial neck regions. Posterior cervical region.	2	MEDRI - Department of Anatomy
P25	Parotideomaseteric region. Fossa retromandibularis.	2	MEDRI - Department of Anatomy
P26	Infratemporal fossa. Pterygopalaine fossa.	2	MEDRI - Department of Anatomy
P27	Nerves of the head and neck.	2	MEDRI - Department of Anatomy
P28	Blood vessels of the head and neck.	2	MEDRI - Department of Anatomy
P29	Oral cavity. Teeth. Pharynx.	3	MEDRI - Department of Anatomy
P30	Larynx. Nasal cavity.	3	MEDRI - Department of Anatomy
P31	Salivary glands. Thyroid gland.	2	MEDRI - Department of Anatomy
P32	Work on the specimen.	2	MEDRI - Department of Anatomy





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TOTAL TEACHING HOURS 66

	FINAL EXAM DATES
1.	08.04.2024.
2.	23.05.2024.
3.	27.06.2024.
4.	05.09.2024.
5.	19.09.2024.

	Lectures	Seminars	Practicals	Total
Total number	38	46	66	150
On-line	0	0	0	0
Percentage	25,3%	30,7%	44,0%	100%